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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,504	12/14/2001	John O. Lamping	020087-003500US	5615

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EXAMINER

NGUYEN, CINDY

ART UNIT PAPER NUMBER

2161

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/017,504

Applicant(s)

LAMPING ET AL.

Examiner

Cindy Nguyen

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-13 and 15-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

Response to amendment filed 11/09/05.

***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-13, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doerre et al. (U.S 6446061) in view of Powers et al. (US 6513027) (Powers).

Regarding claims 1 and 11, Doerre discloses: A method and a computer aided information organization device for clustering a plurality of items, each of the items including information, guided toward an initial organization structure, the method comprising:

inputting a plurality of items, each of the items including information, into a clustering process (col. 12, lines 17-34, Doerre);

inputting an initial organization structure into the clustering process, the initial organization structure including one or more categories, at least one of the categories being associated with one of the items (col. 12, lines 35-41, Doerre);

processing using at least processing hardware the plurality of items based upon at least the initial organization structure and the information in each of the items in at least the clustering process (col. 19, lines 35-41, Doerre)

However, Doerre didn't disclose: automatically determining using at least the processing hardware a resulting organization structure based upon the processing of the plurality of items, the initial organization structure, and the information in each of the items, the resulting organization structure comprising at least a portion of the initial organization structure and at least one additional category coupled to the initial organization structure. On the other hand, Powers discloses: automatically determining using at least the processing hardware a resulting organization structure based upon the processing of the plurality of items (as an n-dimensional cluster algorithm is executed using the dimensional category vectors identifier for each term), the initial organization structure (as target category), and the information in each of the items, the resulting organization structure comprising at least a portion of the initial organization structure and at least one additional category (new subcategory) coupled to the initial organization structure (col. 7, lines 30-55, Powers). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art

to include the steps for determining a resulting organization structure based upon the processing of the plurality of items, the initial organization structure, and the information in each of the items, the resulting organization structure comprising at least a portion of the initial organization structure and at least one additional category coupled to the initial organization structure in the system of Doerre as taught by Powers. The motivation being to enable the system provided a method for organizing hierarchical information elements and their relationships enables a much speedier search when information element of information is sought, identification of its category affiliation not only designates the features to be looked for and immediately directing the search to the relevant section of the organization.

In addition, Doerre/Powers discloses: storing the resulting organization structure in the one or more memories or another memory (col. 15, lines 15-20, Doerre) .

Regarding claims 2 and 12, all the limitations of these claims have been noted in the rejection of claims 1 and 11 above, respectively. In addition, Doerre/Powers discloses: wherein the processing comprises determining a likeness level between a first item and a second item, the likeness level between two items increased if they are both similar to items in one or more of the categories of the initial organization structure col. 18, lines 25-44, Doerre).

Regarding claims 3 and 13, all the limitations of these claims have been noted in the rejection of claims 2 and 12 above, respectively. In addition, Doerre/Powers

discloses: wherein the determining the likeness level between the first item and the second item comprising:

associating a first feature vector with the first item and a second feature vector with the second item, each feature vector representing information associated with each item (col. 17, lines 28-43, Doerre);

adding a first additional feature and a second additional feature to the first feature vector and the second feature vector of the first item and the second item, respectively, the first additional feature representing a first category of the initial organization structure and the second additional feature representing a second category of the initial organization structure, the first additional feature providing a degree to which the first item is similar to one or more items in the first category of the initial organization structure (col. 13, lines 63 to col. 14, lines 20, Doerre);

calculating a degree of similarity of the first item and the second item including calculating a similarity measure between the first additional feature and the second additional feature (col. 18, lines 13-24, Doerre).

Regarding claim 5, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Powers discloses: wherein the resulting organization structure relates to the initial organization structure based upon a category similarity (col. 15, lines 1-20, Doerre).

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Powers discloses: wherein the resulting

organization structure relates to the initial organization structure based upon a similarity of hierarchy structure (col. 18, lines 52-67, Doerre).

Regarding claim 7, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Powers discloses: wherein the item is a document, a product, a person, a DNA sequence, a purchase transaction, a financial record, or a species description (col. 18, lines 25-44, Doerre).

Regarding claim 8, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Powers discloses: further comprising outputting the resulting organization structure on an output device (col. 20, lines 44-57, Doerre).

Regarding claim 9, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Powers discloses: wherein the processing hardware uses at least a 500 MHz clock to efficiently run the clustering process (col. 20, lines 16-30, Doerre).

Regarding claim 10, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre/Powers discloses: wherein the plurality of items includes at least 10,000 items (col. 20, lines 32-42, Doerre).

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Doerre/Powers discloses: further comprising a sixth code directed to outputting the resulting organization structure, the resulting organization structure including a plurality of categories (col. 15, lines 15-20, Doerre).

Regarding claim 16, all the limitations of this claim have been noted in the rejection of claim 15 above. In addition, Doerre/Powers discloses: further comprising a seventh code directed to inputting additional items using the resulting organization structure (col. 15, lines 15-20, Doerre).

Regarding claim 17, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Doerre/Powers discloses: further comprising a sixth code directed to independently modifying the resulting organization structure using a graphical user interface (col. 16, lines 61-67, Doerre).

Regarding claim 18, all the limitations of this claim have been noted in the rejection of claim 17 above. In addition, Doerre/Powers discloses: wherein a user provides the independently modifying coupled to the graphical user interface (col. 17, lines 1-6, Doerre).

Regarding claim 19, Doerre/Powers discloses: a computer implemented method for clustering a plurality of items, the method comprising: inputting a first hierarchy, the first hierarchy includes at least one category (col. 13, lines 24-54, Doerre);

inputting a plurality of items, each of the plurality of items including information (col. 14, lines 26-57, Doerre);

the at least one category being associated with one of the items (col. 14, lines 26-57, Doerre);



processing by the computer the plurality of items based upon at least the first hierarchy and the information in each of the items (col. 14, lines 26-57, Doerre);

automatically determining a second hierarchy based upon the processing of the plurality of items, first hierarchy, and the information in each of the items, the second hierarchy including a portion of the first hierarchy and at least one additional category coupled to the first hierarchy (col.7, lines 30-55, Powers);

storing the second hierarchy in memory (col. 14, lines 57 to col. 15, lines 20, Doerre);

assigning each of the plurality of items to a category of the second hierarchy (col. 12, lines 16 to col. 13, lines 54, Doerre).

## **1. Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pirolli et al. (U.S 5895470). System for categorizing documents in a linked collection of documents.

Hickerman et al. (U.S 6216134). Method and system for visualization of clusters and classifications.

Keith (U.S 6629097). Displaying implicit associations among items in loosely structured data set.

Marques (U.S 6182066). Category processing of query topics and electronic document content topics.

## **2. Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7240 for After Final communications.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Cindy Nguyen  
January 5, 2006



MOHAMMAD ALI  
PRIMARY EXAMINER